

Amendments to the Drawings

Attached is a replacement drawing sheet for amended
Figure 1.

REMARKS

Applicants hereby amend Claims 20, 29 and 30, such that all of pending Claims 7-18, 20, 22-28 and 29-33 are in condition for allowance based on the following discussion.

I. Section 112 Objections

With respect to the Section 112 rejections of the Office Action dated November 14, 2006, reconsideration is requested based on the following comments:

Office Action - Paragraph 1

As to Paragraph 1, the manner in which the weapon is placed in the activated/deactivation state is asserted in the Office Action as being objectionable and requiring amendment of the drawings. Accordingly, Figure 1 and specification Paragraph 29 are amended to diagrammatically represent an electromechanical locking mechanism 26. This amendment does not add new matter.

Office Action - Paragraph 3

As to Paragraph 3, Claims 26 and 31 are objected to based upon the recitation in these claims that the name or picture of the authorized user is to be displayed on an indicator of the identification unit. Applicants respectfully disagree with this objection, and reserve the right to contest this objection on appeal.

These claims recite the step of displaying the name or the picture of the authorized user on the identification mechanism. Pursuant to MPEP §2164.08, this section, as argued previously, sets forth that "not everything necessary to practice the invention need be disclosed" and in fact it is best to omit some information. "All that is necessary is that one skilled in the art be able to practice the claimed invention, given the level of knowledge and skill in the art." It is not understood how the skilled artisan would not

understand how to practice the claimed invention based upon the specific disclosures of the specification.

More particularly, the disclosures of Paragraphs 26 and 28 define that there are three interconnected structural components comprising the identification mechanism 2 which "includes a sensor for detecting an identification code, namely a fingerprint reader 5", a microprocessor 9 which is included on a printed circuit 8, and an LCD indicator 12 which is "controlled by" the microprocessor 9. These components are specifically recited in Figure 26. Further, Paragraph 28 defines that the microprocessor 9 has a store. This store has the fingerprint pattern of the authorized person, or other identification, stored therein. This clearly defines that the identification mechanism 2 senses a characteristic of the authorized user wherein the microprocessor serves as a comparator which compares the input fingerprint with the stored fingerprint and effects matching therebetween. Hence, the microprocessor 9 is able to identify the authorized person through the comparison and matching of the input and stored fingerprint. Clearly, an identification of an authorized user is accomplished.

Next, it is possible to use this authorization routine to effect display of the name or picture of the authorized user of the weapon on the display 12. In particular, Paragraph 26 states that the LCD indicator and the other electronic components of the identification mechanism are controlled by the microprocessor 9. In this regard, the identification mechanism 2 further includes the function key 13 as part of the identification mechanism wherein the function key is configured to indicate the name or picture of the authorized user of the weapon on the display 12. Thus, the identification mechanism 2, including the function key 13 thereof, are operatively connected to the microprocessor 9, which microprocessor 9 in turn is connected to the display 12. It is believed that the skilled artisan would readily appreciate that the name or picture would be in the store of

the microprocessor 9 and the function key 13 would be configured and cooperate with the microprocessor 9 so that the name or picture is displayed through the microprocessor 9 on the display 12. This is believed to be clearly within the realm of skill of the artisan and it is completely unclear how this disclosure would not enable a skilled artisan to connect a function key with a microprocessor and a display to effect the display of a picture or name of the authorized user that has been identified by the microprocessor 9 during the comparison process.

Further, the standard is not that the specification would teach every exact detail, but only that the specification teach the skilled artisan how to make and use the scope of the claimed invention without "undue experimentation". MPEP §2164.08. Hence, the standard of enablement being applied against Claims 26 and 31 is not believed to be in conformance with established standards of enablement, and the objection to such claims is believed improper. Withdrawal of the objection to Claims 26 and 31 is respectfully requested.

Office Action - Paragraph 4

Claim 30 is rejected as failing to comply with the written description requirement.

In this regard, it is noted that Paragraph 4 of the specification refers to prior art which requires a coded signal that is continuously communicated in coded form wherein receipt of the continuously coded signal is required. This system can be overcome or paralyzed as disclosed in Paragraph 5 by a strong interfering transmitter which interferes with the continuously coded signal and overpower same so as to disable the weapon from firing.

Paragraph 7 further discloses that the present invention, after the initial unlock code is received, exclusively depends on the signal strength which must be continuously received at a level that is at least as great as the signal strength which occurs at the maximum usable distance between the user and

weapon. Thus, when the signal strength is at or above this minimum signal strength, the weapon is placed in the active state. As disclosed in Paragraph 8, "maintaining the readiness of the weapon to fire is therefore exclusively dependent upon signals received by the receiver having a field strength, which corresponds to this minimum field strength defined at the maximum distance between the transmitter and receiver. The weapon remains activated when the field strength is equal to or greater than the field strength at the minimum level.

Paragraph 9 further defines that the readiness of the weapon to fire cannot be disturbed by an interfering transmitter since only the strength or the field strength of the received signals is important. Paragraph 9 further discloses that the weapons can no longer be rendered functionless with a strong interfering transmitter". Thus, the skilled artisan will readily appreciate that an interfering transmitter cannot overpower the signal, since an increase in signal strength would not render the weapon of the invention useless since the signal strength would at all times be above the minimum required signal strength.

Thus, the subject matter of Claim 30 is clearly within the scope of the invention as possessed by the inventors and as disclosed in the application. Claim 30 is believed to be fully supported by the disclosure. Claim 30, however, is also amended to provide alternate language which may be more acceptable to the Examiner wherein the additional insert further specifically conforms to the disclosure of Paragraph 9.

Based on the foregoing, Applicants respectfully contest the objection to Claim 30, and reserve the right to appeal such objection.

II. Prior Art Rejections

As to the prior art, Claims 7-11, 13, 14, 17, 18, 20, 22, 29 and 32 are rejected as being anticipated by Reiner.

However, Reiner does not disclose applicant's claimed invention since Reiner does in fact require continuous transmission of the codes 30 even during simultaneous distance monitoring between the weapon and identification device.

As has been discussed at length, applicant's invention generally relates to the method of controlling the activation/deactivation of a weapon while avoiding interfering transmissions which would overpower a signal from an identification unit of a user. This is accomplished by using the identification mechanism or unit to identify an authorized user, and then send an activation code to the weapon which is received and causes activation of the weapon to permit firing. After the weapon is made active, however, the receiver on the weapon monitors the signal strength of a continuous signal transmitted by the identification mechanism wherein the weapon processor maintains the weapon active "exclusively dependent" upon the signal strength from the continuous signal sent by the identification mechanism and without regard to the activation code or activation signal.

As such, the weapon of the claimed invention first receives the activation code from the identification mechanism to make the weapon active, and thereafter, the processor on the weapon exclusively monitors the strength of the signals being received without regard to the content of the signals, i.e. frequency, coding, etc. and maintains the weapon active so long as the signal is at a level above a minimum signal strength. Hence, if a powerful interfering transmitter enters the weapon zone, the interfering signal generated thereby would only add to the total signal strength which would continue to stay above the minimum signal strength and the interfering transmitter would not interfere with continued activation of the weapon.

As stated previously, Reiner, in fact, completely differs from this arrangement as claimed since Reiner discloses continuous receipt of the acceptable identification code, even

when Reiner is also secondarily and simultaneously evaluating distance.

In response to Applicant's position, the comments in the Office Action assert that Applicant's position fails "because they rely on the false assumption that is incorrect, namely that the coded signal 30 sent by the identification unit to the firearm is a continuous signal." In fact, Applicant's do believe their position is correct and supported by the express teachings of Reiner.

In this regard, Claim 5 of the Reiner '642 patent expressly discloses that the transmission and/or receiving unit (19, 219) of the user (17, 217) is "designed for the continual or continually consecutive, intermittent signal transmission". This thereby does teach that the codes 30 are sent continuously or essentially continuously. In support, Col. 5, lines 32-35 of the Reiner '642 patent discusses Claim 5 and further states that this provides advantages yet "performs an authorized user check without any loss of security, if the checking intervals are kept correspondingly short."

Additional support is provided from the published US application corresponding to the Reiner '642 patent, namely Published US Patent Application No. 2002/0032976 A1 (herein the Reiner '976 application). This published application is believed closest to the original PCT disclosure and contains substantial differences as to the Reiner '642 patent. Most notably, patented Claim 5 actually conforms to published Claim 10 of the '976 Application. This claim 10 includes the same claim language and application Paragraph 13 contains the same discussion of this claim language as that discussed above relative to patent Claim 5.

Additionally, the Reiner '976 application also includes application Claims 12 and 41 which are discussed in application Paragraph 41. It is noted that Claims 12 and 41 disclose that "the transmission and/or receiving unit (20) in the region of the firearm (2, 4) is designed for the continual

and/or continually consecutive, intermittent emission of identification codes (30, 36)". Notably the language of application claims 10, 12 and 41 substantially track each other, and hence are believed to expressly disclose that the identification codes 30 are transmitted continuously or at least substantially continuously through a "continuously, consecutive intermittent signal".

The skilled artisan would have knowledge of both the Reiner '642 patent and the corresponding published '976 application so as to use both documents to interpret the scope of disclosure of the Reiner art.

Hence, the coded signals 30 are in fact sent continuously.

As to such signals 30, all of Col. 10 and through Col. 11, lines 1-3 address how these signals are transmitted, possibly encrypted and decrypted, and then compared (after being decrypted) to determine if the identification code 30 matches a code 36 in the memory unit. The following citations to this disclosure are from the '642 patent for reference purposes.

As noted previously, this disclosure does disclose multiple repeated transmissions. In this regard, Col. 10, lines 34-37 disclose that the "encoding code" and "decoding code" vary from "one transmission to the next". It is believed clear that the encoding and decoding codes are in fact encryption and decryption algorithms and the reference to a signal being "encoded or even uncoded" in Col. 10, lines 57-62 is really a description of the activation code 30 being encrypted or not.

Col. 10 further discloses that when the code 30 is received, it is compared for a match with stored codes 36. This comparison is done each time a code is received, and since transmission of the code 30 is sent by a continual or continually consecutive, intermittent signal transmission, the code 30 would be checked substantially continually and would

need to continually match the code 36 for the release element 15 to be active.

While columns 10 and 11 of Reiner discuss distance, this does not eliminate the fact that the code 30 continues to be transmitted.

In further support, Col. 11, lines 18-23, disclose that distance protection can be provided by limiting the transmission range, which also indicates that continuous transmissions would be required for this option to work. Since this passage is talking about the transmissions relating to the identification code 30, this necessarily indicates that the identification code 30 continues to be monitored.

Additionally, it appears there may be secondary distance measuring devices 37 but this does not negate the continued transmission and monitoring of the code 30 which is expressly disclosed in the Reiner '976 application.. Hence, Reiner clearly discloses repeated transmission of the code 30, and while the distance measurement is a secondary, simultaneous test, the code 30 is still being transmitted and compared.

In further support of the continuous transmission of the code 30, patent Claim 7 and application Claim 13 recite that the range of transmission of the identification codes is greater than the distance or the distance range. Application paragraph 16 discusses application Claim 13 and states that "an authorized user can be identified without however deactivating the locking device e.g. for removal of the firearm and/or for firing a shot, and only when the authorized user is located with the distance range e.g. to the firearm can the locking device be deactivated". This clearly indicates that the identification code and distance measuring are two different processes that occur and may occur at different distance parameters. In particular, the code comparison would be occurring even when beyond the distance range.

At no point is Reiner believed to disclose that the continuous tracking of the identification code 30 would be

terminated and the system would rely solely upon the distance measuring to maintain the firearm active.

As such, the Reiner documents do not anticipate Applicant's claimed invention.

Specifically, Applicant's Claim 7 defines that an activation code is sent and then the continuous signal is transmitted. The activation code causes the weapon to be placed in the active state, and then the strength of the continuous signal received by the weapon receiver is monitored. The claimed method maintains the weapon in this active state exclusively dependent upon the strength of the signal being above the minimum level. Thus, signal strength is the sole determinant of the maintaining step. This is not true in Reiner, and Reiner does not disclose, teach or suggest applicant's claimed invention.

Hence, Claims 7-15, 17 and 18 are believed distinguishable from Reiner.

As to independent Claim 20, this claim defines transmitting the activation code followed by an uncoded signal. Further, the weapon is maintained in the active state exclusively dependent upon the uncoded received at the weapon being at or above the minimum strength, regardless of the signal frequency or the presence of an interference signal. In accord with the above discussion, Reiner does not disclose a method of maintaining the weapon active exclusively dependent upon the strength of an uncoded signal received by the weapon. Hence, claims 20 and 22-26 are believed allowable.

As to Claim 29, here again this claim defines an activation code and a continuous signal wherein the weapon is maintained in the activated state exclusively dependent upon the signal strength of the continuous signal being at or above a minimum strength and regardless of signal frequency or the presence of a code therein. This thereby allows for avoiding of deactivation by an interfering signal. Thus, Claims 29-33 are also believed allowable.

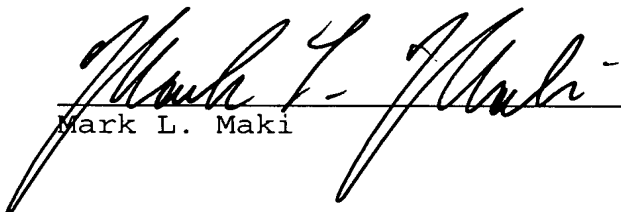
As to Funfgelder, this reference fails to cure the deficiencies of Reiner discussed above. In particular, this reference is now cited under Section 102 as an anticipatory reference for the pending claims even though such was not the case through multiple Office Actions. In this regard, Claim 1 of Funfgelder requires that the object is activated or remains activated for each positive code comparison and if a predetermined distance is maintained. The disclosure also discloses that locking of the weapon is cancelled only so long as the signal, namely the coded signal is received. Hence, this system also requires continuous receipt of a coded signal and proper distance, and thus, differs from Applicant's claimed invention which does not require a continuous coded signal.

As such, Funfgelder is not believed to anticipate Applicant's claimed invention.

As to the obviousness rejections of Claims 12, 24, 15, 25, 33 and 23, all of these references require Reiner as disclosing the basic invention of the independent claims. In that Reiner is defective and does not disclose the features of the independent claims, Reiner is not believed effective as the primary reference for the obviousness rejections, and withdrawal of such rejections is respectfully requested.

Based on the foregoing, all of the claims are believed in condition for allowance.

Respectfully submitted,



Mark L. Maki

MLM/ps

FLYNN, THIEL, BOUTELL	Dale H. Thiel	Reg. No. 24 323
& TANIS, P.C.	David G. Boutell	Reg. No. 25 072
2026 Rambling Road	Terryence F. Chapman	Reg. No. 32 549
Kalamazoo, MI 49008-1631	Mark L. Maki	Reg. No. 36 589
Phone: (269) 381-1156	Liane L. Churney	Reg. No. 40 694
Fax: (269) 381-5465	Brian R. Tumm	Reg. No. 36 328
	Steven R. Thiel	Reg. No. 53 685
	Donald J. Wallace	Reg. No. 43 977
	Sidney B. Williams, Jr.	Reg. No. 24 949

Encl: Substitute Drawing Sheet

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